

Second Executive Stakeholder Meeting Summary

April 20, 1999

Arlington, Virginia

Overview

The meeting started with welcoming remarks from Stephen Piccot of Southern Research Institute, Penny Hansen of USEPA, and David Kirchgessner of USEPA. Following this, Mr. Piccot provided an overview of the activities conducted by the Center since the first meeting of the Executive Stakeholder Group in March of 1997, and outlined the goals of the meeting. Mr. Piccot reviewed the goals set in the first meeting, outlined the progress made in accomplishing these goals, and highlighted the “lessons learned” so far. Mr. Piccot completed his presentation with an overview of the 7 GHG technology verifications that have been either completed, or are in the process of being verified.

Following a break, Ms. Sushma Masemore presented the results of a market survey conducted for the Center by ICF Kaiser. The purpose of the survey was to identify new technology areas that may need ETV performance verification services. In addition, results from last years market survey were revisited in an effort to assess promising areas that were not adopted last year. Finally, promising new technology areas identified as a result of the Center’s on-going solicitation efforts were identified. A key output from Ms. Masemore’s presentation was an aggregate list of verification candidates and strategies. A list of these candidates, shown below, was presented later to the Executive Group for guidance on whether or not they should be pursued further.

- Develop an electricity generation stakeholder group for niche areas
 - Initial focus: distributed power, SF6, bio-fuels
 - Keep an ear to the rail for new candidates
 - Do not pursue large-scale central power technologies
- Continue efforts in oil and gas industry
 - Complete user-identified high priority technologies
 - Evaluate remaining user-identified technologies
- Consider specific technologies emerging from earlier technology area review
 - Industrial energy production improvement
 - Solar flares at landfills
 - Bio-reactor operations at landfills
 - Agricultural waste collection and use (swine)
 - Anaerobic process & waste CH₄ use @ POTWs
 - Geothermal heat pumps
 - Gas-fired residential heat pumps
 - PFC mitigation technologies (microelectronics)

Prior to presenting this list for Stakeholder Guidance, technology “experts” gave presentations on selected areas of potential interest to the Center. These included distributed electrical power technologies (Sarah McKinley, Distributed Power Coalition of America), greenhouse gas monitoring technologies (Peter Westlin, USEPA Emissions Measurements Center), sulfurhexafluoride mitigation and monitoring technologies (John Quinn, Baltimore Gas and Electric), and PFC mitigation technologies (Sally Rand, USEPA Office of Air and Radiation). After the expert presentations were concluded, an open discussion was held to obtain feedback on the areas listed above. Each expert presenter identified the types of technologies and issues associated with their respective areas, and addressed the need for performance verification at different levels of detail.

Following the open discussion session, Mr. Frank Joshua of the United Nations Conference on Trade and Development gave a presentation outlining the Kyoto Protocol provisions and verification/certification requirements. Mr. Joshua explained where various nations, international groups, and the Conference of the Parties may be headed over the next few years with supporting/changing the Kyoto Protocol, and with executing emissions trades, clean development mechanism projects, and JI projects. Mr. Joshua’s presentation highlighted the verification/certification issues surrounding various articles within the Kyoto Protocol.

Summary of Stakeholder Guidance

A list of all Executive Stakeholders is attached, and those that attended the Second Executive Stakeholder meeting are highlighted. A number of observers attended as well, and these individuals are listed in the attachment as well. A total of 32 individuals attended the meeting including 10 Executive Stakeholders, 15 speakers/observers, and 7 ETV program staff from both the EPA and SRI organizations.

After reintroducing the list of recommended verification candidates (see earlier bullets) presented by Ms. Masemore to the Stakeholder Group, the floor was open for a discussion of these points. The session was very active, and the Stakeholder Group provided several important suggestions and recommendations. Comments, questions, and suggestions were also offered by most of the observers present. A summary of the major comments and recommendations offered in the open session are provided below.

Recommendation 1: Develop an electricity generation stakeholder group for niche areas. This recommendation was supported, along with the general strategy identified for becoming established in this new electricity generation area. Although support for most of the initial technology focus areas was expressed (i.e., distributed power, SF6 technologies), several stakeholders cautioned the Center about verifying GHG mitigation strategies which relied on biomass utilization. The primary concern was that key benefits of these technologies, particularly the CO2 reduced via uptake by the biomass, would be difficult to verify technically, and could thrust the Center into a major policy debate regarding methods for verifying GHG reductions from forestry related projects. In

addition, it was expressed by several stakeholders that biomass technology implementation may be “plant specific” and performance verification may be difficult to quantify and generalize. As a consequence of this input, the Center plans to de-emphasize biomass related technologies used to generate electricity. Once widely acceptable guidelines for determining GHG reductions for these types of technologies are developed and published, the Center will reconsider them.

Recommendation 2: Continue efforts in the oil and gas industry. Although there was little discussion about this recommendation, no stakeholders expressed concern, and one voiced strong support for continuing this effort. As a consequence of this input, the Center plans to continue seeking and evaluating technologies in this area.

Recommendation 3: Consider other specific technologies. A significant amount of discussion occurred on several of the technology areas listed below. Short synopses of the key elements of each conversation are presented below.

- Industrial energy production improvement. Little focused discussion occurred on this technology, but concerns about the Center’s involvement were not expressed. Center staff addressed questions about the specific types of technologies under considerations.
- Solar flares at landfills. With no regulatory or other impetus to use these devices, several stakeholders felt this technology had little market potential, and thus, was not a good candidate. These technologies will not be actively pursued by the Center.
- Bioreactor operations at landfills. This topic did not generate much discussion.
- Agricultural waste collection and use (swine). At least one stakeholder indicated that this was not a good candidate for EPA sponsored ETV performance verification. It was felt that government agencies focused on agricultural issues would be more effective and credible at increasing the penetration of these technologies. These technologies will not be actively pursued by the Center.
- Anaerobic process and waste CH₄ use @ POTWs. Again, there was not much discussion on this topic.
- Geothermal heat pumps. Although not discussed much, support for examining these systems was voiced by one stakeholder member.
- Gas-fired residential heat pumps. Although not discussed much, support for examining these systems was voiced by one stakeholder member.
- PFC mitigation technologies (microelectronics). Based on comments from several stakeholders and one expert presenter, technology options associated with this area are typically implemented by the semi-conductor manufacturers, and may not require ETV services. It was suggested that PFC mitigation in the aluminum and microelectronics industries were likely not good candidates for ETV verification.

Attachment A
Participants List

Greenhouse Gas Technology Verification Center Participants Present
U.S. Environmental Protection Agency ETV Program Participants Present
Executive Stakeholders Present
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